



# State of Utah

DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

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Salt Lake City, Utah 84180-1203  
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January 24, 1996

William and Preston Bown  
Utah Building Stone Supply  
842 West 400 North  
Bountiful, Utah 84987

Re: Initial Plan Review, Notice of Intention to Commence Large Mining Operations, Utah Building Stone Supply Company, Dove Creek Quarry, M/003/016, Box Elder County, Utah

Dear Mr. Bown:

The Division has completed a review of your draft Notice of Intention to Commence Large Mining Operations for the Dove Creek Quarry, located in Box Elder County, Utah, received July 31, 1995. After reviewing the information, the Division has the following comments which will need to be addressed before tentative approval may be granted. The comments are listed below under the applicable Minerals Rule heading. Please format your response in a similar fashion. Please note, you may not expand your operation until these deficiencies are addressed, appropriate reclamation surety is posted and your plan is formally approved by the Division.

## **R647-4-105 - Maps, Drawings & Photographs**

### *105.2 Surface facilities map:*

The application does not have adequate drawings or descriptions to determine the areas to be disturbed. The map provided does not show access to two proposed pits in section 13. If there are existing roads, they need to be shown on the map. If they are proposed roads, they also need to be shown on the map. The area affected by the roads also needs to be added to the disturbed acreage total.

### *105.3 Drawings or Cross Sections (slopes, roads, pads, etc.)*

Please Provide typical cross sections of roads, pads, pits, and waste rock areas.

A reclamation treatments map(s) is needed. This map(s) will need to show what roads will be reclaimed and which roads will remain as part of the post mining land use, areas that will be covered with soil, areas of solid rock outcrop (areas where topsoiling and seeding will not occur) and areas that may receive other reclamation treatments such as deep ripping, mulch, fertilizer, etc.





**R647-4-106 - Operation Plan**

*106.3 Estimated acreages disturbed, reclaimed, annually.*

This section was not addressed. The map identifies 13 acres of quarry and pad areas that are currently disturbed and 12 acres of proposed quarry disturbance (plus 2 future quarry areas that have no acreage indicated). No acreage is given for roads or the campsites. On April 25, 1995, the Division, in consultation with the Forest Service, determined that one acre of road will need to be reclaimed at the end of mine life. In November of 1995, 0.34 acres of new road was disturbed to the northeast, yielding a total of approximately 1.34 acres of road to be included in your overall disturbance. You will need to include the acreage of all proposed roads as well. Assuming a width similar to the new road made in November, we estimate that there will be an additional 2.55 acres [1.5 miles of proposed road] of disturbance. Please provide a timetable of when new quarry areas will be opened and when the existing quarries will be reclaimed.

*106.5 Existing soil types, location, amount.*

As discussed with Preston during a December 11, 1995 onsite inspection, there are some soils that will need to be salvaged as your mining operation progresses. During that inspection, Preston was instructed to obtain a couple soil samples and send them to a soils lab for analysis. The soil samples should be analyzed for the following parameters: Texture, pH, EC, SAR, and fertility (N, P, K). In addition, you will need to estimate how much soil has been salvaged on site as well as the approximate amount that will be available to salvage in the future. This will be primarily along the proposed roads.

*106.6 Plan for protecting & redepositing soils*

This section was not addressed. Please describe how the soil materials will be stockpiled and protected, and how you will respread these soils at the time of reclamation.

*106.7 Existing vegetation - species and amount*

Your notice included some basic vegetation information. However, during a joint Division/Forest Service inspection on December 11, 1995, it was determined that the data submitted was not accurate. The Division and Forest Service personnel did a survey and found two distinct vegetation types. The first community was along the ridges and upper slopes and consisted of 50% vegetation cover, 10% litter, 30% rock and 10% bare ground. This community was dominated by Wyoming big sagebrush, bluebunch wheatgrass and western wheatgrass. The second community was in the lower slope positions and draws and had 80% vegetation cover, 9% litter, 10% rock and 1% bare ground. This type is dominated by serviceberry and basin wildrye. Your application will need to be revised to reflect this basic information.

*106.9 Location of wasterock stockpiles*

Please show on the map the location of all wasterock stockpiles. Also, any piles that are not used for backfilling the pits will need to be reclaimed. Please provide detailed reclamation plans describing how these waste rock piles will be reclaimed.



**R647-4-107 - Operation Practices**

*107.3 Erosion control & sediment control*

Please describe how you will minimize erosion and prevent sediment from leaving the site.

*107.4 Deleterious material safely stored or removed*

Please describe how potentially deleterious materials will be stored on site and removed (this includes fuel, oil, grease, etc.) Indicate the volume of these materials that you may need to keep on site at any one time and how they will be protected from spillage. If any of these materials are stored on-site, they will be required to be kept in a 100% containment structure.

*107.5 Suitable soils removed & stored*

Please refer to comments under R647-4-106.5 and .6.

*107.6 Concurrent reclamation*

Please refer to comments under R647-4-106.3

**R647-4-109 - Impact Assessment**

*109.1 Impacts to surface & groundwater systems*

While impacts to groundwater may be negligible, impacts to surface waters needs to be addressed. It appears from the map that new roads will be constructed around the boggy area along the access road. This needs to be clearly stated. Also, you need to discuss how drainages will be crossed to minimize impacts to stream channels. Also, you will need to provide reclamation plans to restore any impacted drainages or stream channels.

*109.4 Slope stability, erosion control, air quality, safety*

Final reclamation contours, pit slopes, etc. need to be described. Typical cross-sections of the final pit configurations showing final slope of the highwalls needs to be provided.

**R647-4-110 - Reclamation Plan**

*110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed*

Please provide a map showing which roads are to be left after reclamation. A description of the reclamation plans for roads that will not remain after mining terminates needs to be provided. It appears that waste rock materials will be used to fill pits and possibly backfill against highwalls to reduce or eliminate them. Please confirm this assumption.



*110.5 Revegetation planting program*

While the Division may grant variances to certain revegetation performance standards-(see variance section), there will be areas that will require revegetation (including topsoil replacement, seedbed preparation, planting methods, mulching, fertilizing, etc.). A recommended seed mix is attached for areas that will require seeding. This seed mix has been reviewed by the Forest Service and was found to be acceptable to them. Please acknowledge if this is acceptable to you. The Forest Service should be consulted as your reclamation revegetation plan is developed.

**R647-4-111 - Reclamation Practices**

*111.1 Public safety & welfare*

- 1.15 Constructing berms/fences above highwalls* - Will all highwalls be eliminated? If not, there may be a need to berm and/or fence the top of some highwall areas. Please identify and appropriately label the areas on a map that will have unreclaimed highwalls that will be accessible to the public.

*111.2 Reclamation of natural channels*

Please discuss how stream crossings and natural drainage channels will be reclaimed.

*111.3 Erosion & sediment control*

What measures will be used to control erosion at the time of reclamation?

*111.6 All slopes regraded to stable configuration*

Please refer to comments under section R647-4-110.2

*111.7 Highwalls stabilized at 45 degrees or less*

Please refer to comments under sections R647-4-110.2 and 111.15.

*111.8 All roads & pads reclaimed*

Please refer to comments under section R647-4-110.2

*111.12 Topsoil redistribution*

Please refer to comments under section R647-4-106.6.

**R647-4-112 - Variance**

The operator has requested variances from topsoil salvaging, soil replacement, seeding, fertilizing, mulching and it is assumed from meeting the 70% revegetation standards (since a request for a variance from seeding was made).



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January 24, 1996

The Division will grant a variance for salvaging and redistributing topsoil on existing disturbed areas where no topsoil was originally salvaged. Before any new disturbances are created, the Division will need to inspect these areas to determine if the variance for topsoil salvaging is warranted for these areas. Please note, even an inch or two of soil, if it can be salvaged will greatly improve revegetation success.

The Division will grant a variance from seeding those areas that are solid rock (and from meeting revegetation performance standards on these areas as well).

All areas that will be retopsoiled, or areas where there is sufficient fines that could support vegetation, will need to be seeded, fertilized, and mulched (waste rock areas). This will include all roads that will not remain as part of the approved post mining land use.

Seedbed preparation will be required on all areas that are to be seeded. This may consist of ripping or deep disking to eliminate compaction.

It is the Division's opinion that reasonable reclamation efforts will result in a permanent vegetation cover that will achieve the revegetation performance standards. Therefore, a variance for meeting the revegetation performance standards on areas to be seeded is *not* granted at this time.

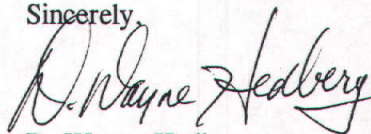
#### **R647-4-113 - Surety**

Please prepare a detailed cost estimate for performing each item in the reclamation plan. The Division will use your estimate as a basis for calculating our own (third party) reclamation cost estimate for this site. Once the final reclamation surety amount is agreed upon by the Division and the Forest Service, you will be required to post the appropriate form of surety.

The Division has enclosed comments received from the U.S. Forest Service that will need to be addressed as well. As per conversations with Mr. Gordon Struthers of the Forest Service, some of these comments (i.e. cultural survey) have already been taken care of.

The Division will suspend further review of the Dove Creek Quarry NOI until your response to this letter is received. Please note, *no new disturbances are to be made* even though they may be identified in your large mining notice, until the plan for this site is approved and surety is posted. If you have any questions in this regard please contact me, Tony Gallegos, Lynn Kunzler, or Tom Munson of the Minerals Staff. If you wish to arrange a meeting to sit down and discuss this review, please contact us at your earliest convenience. Thank you for your cooperation in completing this permitting action.

Sincerely,



D. Wayne Hedberg  
Permit Supervisor  
Minerals Regulatory Program

jb  
Attachment: Seedmix  
Enclosure: USFS 8/7/95 letter w/3 attachments to letter  
cc: Gordon Struthers, USFS w/attachment  
M003016.rvw



Recommended Revegetation Species List  
for

Utah Building Stone  
Dove Creek Quarry  
M/003/016

Prepared by DOGM January 10, 1995  
(this mix was reviewed and OK'd by the USFS)

<u>Common Name</u>	<u>Species Name</u>	<u>*Rate lbs/ac (PLS)</u>
Thickspike wheatgrass	<u>Agropron dasystachum</u>	2.0
Bluebunch wheatgrass	<u>Agropyron spicatum</u>	2.0
Intermediate wheatgrass	<u>Agropyron intermedium</u>	1.0
'Piute' orchard grass	<u>Dactylis glomerata</u>	0.5
Basin Wildrye	<u>Elymus cinereus</u>	2.0
Ladac Alfalfa	<u>Medicago sativa</u>	1.0
Yellow sweetclover	<u>Melilotus officinalis</u>	0.5
Rocky mountain penstemon	<u>Penstemon strictus</u>	0.5
Small burnet	<u>Sanguisorba minor</u>	1.5
Black sagebrush	<u>Artemisia nova</u>	0.1
Wyoming big sagebrush	<u>Artemisia tridentata wyomingensis</u>	0.1
Serviceberry	<u>Amelanchier alnifolia</u>	1.0
Forage kochia	<u>Kochia prostrata</u>	0.5
Bitterbrush	<u>Purshia tridentata</u>	1.0

Total 13.7 lbs/ac

\*This the recommended drill seeding rate.

If the species are to be broadcast seeded, increase the rate by 50%.



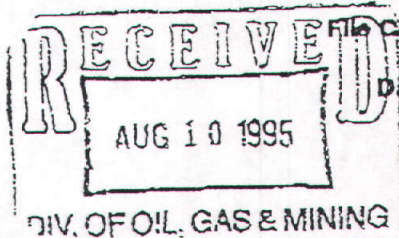


United States  
Department of  
Agriculture

Forest  
Service

Sawtooth  
National  
Forest

Burley Ranger District  
Rt. 3, 3850 Overland Ave.  
Burley, Id. 83318-3242  
208-678-0430



File Code: 2810

Date: August 7, 1995

Div. of Oil, Gas and Mining  
355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
Attn: Lynn Kurzier

Dear Lynn

I have reviewed the Notice of Intent (NOI) for the Dove Creek quarry by Bill Bown you sent me on July 31. Enclosed is a copy of my review notes. I can use most of what is in your NOI form for a new Plan of Operation (POO). Presently the Bown's are working on a less than adequate 1990 POO.

I think the key points of my review are: 1. Better located roads are needed. 2. Is there to be a camp on site. 3. Reseeded and mulching of reclamation areas need to be considered. Bill's natural methods will not work. All of the old areas have weeds only.

Before a new POO can be approved an Environmental Assessment (EA) will have to be completed. Cultural Resource and biological, plants and animals, surveys will need to be done and the resulting reports approved. Our folks are all scheduled for the rest of the summer and the earliest we can get to them would be the summer of 1996. This with the time required to write and process an EA of 180+ days means that a new approved POO for Dove Creek could be as much as two years away. This time could be shorted if the Bowns would hire a consulting company to do the necessary surveys and write the reports and the EA. We would have to approve and direct any company hired.

The NOI does not conflict with the 1990 POO, it just provides more information. If it is adequate for your process, you could approve it and not interfere with the Forest Service. I would like to discuss bonding procedures and amounts before that gets to far along.

Sincerely,

Gordon Struthers  
Mineral Management Specialist

Post-It™ brand fax transmittal memo 7571		# of pages ▶
To <i>Gordon Struthers</i>	From <i>Lynn Kurzier</i>	
Co. <i>USFS</i>	Co. <i>00644</i>	
Dept.	Phone #	
Fax # <i>208-678-0439</i>	Fax #	





# COMPLETENESS CHECKLIST

CHECK  
IF COMPLETE

*Doc Ck*  
*B. H. & Preston Brown*  
ITEM (If incomplete, describe what is needed)

☐ General Information

☒ Principals

☒ Property/Area Description

☒ Description of Operation

☐ Access *Need to locate & construct new rd system.*  
*Dragonite rd system poorly located - much*  
*soil & rd damage with wet weather use*

☐ Map

☐ Project Description

☐ Equipment & Vehicles

*Need listing of all equip. to be used*

☐ Structures

*They now have a "CAMO" well that*  
*continues? Where. What size?*



☐ Environmental Protection Measures

☒ Air Quality

☐ Water Quality

Quarry close to sewer & Spring  
Any special consideration or precautions?

☐ Solid Wastes

Trash to go where?

☐ Scenic Value

N/A

☐ Fish & Wildlife, Plants

BA Needed

☐ Cultural Resources

Need to make provision for CR surveys  
before new roads are open up. Operation  
expense?

☐ Hazardous Substances

Amounts of fuel & Lubo etc to  
be used? stored where.

☐ Close-Out Reclamation

Need to consider reseeding & mulching  
the NATURAL seeding proposed is just  
weeds and most likely does not meet  
the County weed mgt. plans.  
FS will supply seed mix & methods



Other.

An EA will be required before this ROD can be approved by the F.S. The EA will have to have a complete USDAO approved CR Survey. Also required is a Bio Evaluation for Wildlife & Plants. These can not be scheduled until next year. The EIS will take 180+ days to complete. After the CR Survey & EA are approved.